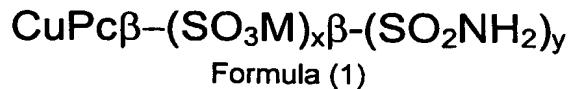


CLAIMS

1. A composition comprising:

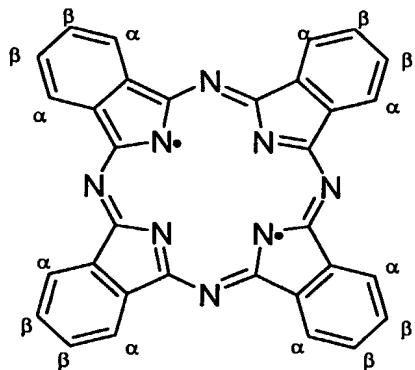
(a) a major dye component which is a mixture of copper phthalocyanine dyes of

5 Formula (1):



10 wherein:

Pc represents a phthalocyanine nucleus of formula;



15

M is a cation;

x and y each independently have an average value of from 0.5 to 3.5;

(x+y) = 4; and

20 the sulfo and sulfonamide substituents are attached to a β-position on the phthalocyanine ring; and

(b) a liquid medium which comprises water and an organic solvent or an organic solvent free from water.

25 2. A composition according to claim 1 wherein the copper phthalocyanine dyes of Formula (1) are prepared by cyclisation of 4-sulfo-phthalic acid to phthalocyanine β-tetrasulfonic acid in the presence of a nitrogen source, a copper salt and a base followed by chlorination and then amination.

30 3. A composition according to either claim 1 or claim 2 where in the copper phthalocyanine dyes of Formula (1) x is 1 to 3.

4. A composition according to any one of the preceding claims where in the copper phthalocyanine dyes of Formula (1) y is 1 to 3.

5. A composition according to any one of the preceding claims where M is sodium, lithium, ammonia and volatile amines or mixtures thereof.

6. A composition according to any one of the preceding claims which comprises:  
(a) from 0.01 to 30 parts of dyes of Formula (1); and  
(b) from 70 to 99.99 parts of a liquid medium which comprises a mixture of water  
10 and an organic solvent or an organic solvent free from water:  
wherein all parts are by weight.

7. A composition according to any one of the preceding claims wherein at least 70% by weight of the total amount of phthalocyanine dye in said composition is of Formula (1).

15 8. A composition according to any one of the preceding claims wherein at least 90% by weight of the total amount of phthalocyanine dye in said composition is of Formula (1).

20 9. A composition according to any one of the preceding claims which is an ink suitable for use in an ink-jet printer.

10. A process for forming an image on a substrate comprising applying an ink according to claim 9 thereto by means of an ink-jet printer.

25 11. A material printed with a composition according to any one of claims 1 to 9 or by means of a process according to claim 10.

12. A material according to claim 11 that is a photograph printed using an ink-jet printer.

30 13. An ink-jet printer cartridge comprising a chamber and an ink wherein the ink is in the chamber and the ink is as defined in claim 9.

14. An ink-jet printer comprising a cartridge as defined in claim 13.